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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,277	07/09/2001	Gurtej S. Sandhu	MI22-1780	1605

21567 7590 01/18/2002

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SPOKANE, WA 992013828

EXAMINER

SCHILLINGER, LAURA M

ART UNIT	PAPER NUMBER
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2813

*remailed*

DATE MAILED: 01/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,277	07/09/2001	Gurtej S. Sandhu	M122-1780	1605

2157 7590 12/04/2001

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EXAMINER

SCHILLINGER, LAURA M

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DATE MAILED: 12/04/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/902,277

Applicant(s)

SANDHU ET AL.

Examiner

Laura M Schillinger

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 37,38 and 43-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 37,38 and 43-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 37-38 and 43-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Lo et al ('558).

In reference to claim 37, Lo teaches a method comprising:

Forming a gate (Col.4, lines: 10-23 and Fig.1 (13));

Forming a polycrystalline film over the gate (Col.2, lines: 23-33 and Fig.1 (15));

Forming a Fluorine containing layer proximate to the polycrystalline TFT layer (Col.4, lines: 33-41); and

Transferring F into the polycrystalline TFT layer from the F containing layer (Col.5, lines: 5-20).

In reference to claim 38, Lo teaches wherein the polycrystalline TFT comprises Si (Col.2, lines: 23-33).

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In reference to claim 43, Lo teaches wherein the forming a F containing layer comprises forming a sacrificial F containing layer over the TFT layer by CVD utilizing WF(6) and SiH(4) precursors (Col.4, lines: 33-41).

In reference to claim 44, Lo teaches further comprising after the transferring F, removing the sacrificial layer form over the TFT layer (Col. 4, lines: 42-51).

In reference to claim 45, Lo teaches a method comprising:

Forming a gate (Col.4, lines: 10-23 and Fig.1 (13));

Forming a polycrystalline TFT layer over the gate (Col.2, lines: 23-33 and Fig.1 (15));

Forming a F containing layer over the polycrystalline TFT layer (Col.4, lines: 33-41);

Providing a buffering layer intermediate the TFT layer and the F containing layer (Col.5, lines: 1-15); and

Transferring F into the polycrystalline TFT from the F containing layer (Fig.1(15)).

In reference to claim 46, Lo teaches a method comprising:

Forming a gate (Col.4, lines: 10-23 and Fig.1 (13));

Forming a polycrystalline film over the gate (Col.2, lines: 23-33 and Fig.1 (15));

Forming a Fluorine containing layer proximate to the polycrystalline TFT layer (Col.4, lines: 33-41); and

Transferring F into the polycrystalline TFT layer form the F containing layer (Col.5, lines: 1-15).

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In reference to claim 47, Lo teaches wherein the polycrystalline TFT comprises Si (Col.2, lines: 23-33 and Fig.1 (15)).

In reference to claim 48, Lo teaches wherein the forming a F containing layer comprises forming a sacrificial F containing layer over the TFT layer by CVD utilizing WF(6) and SiH(4) precursors (Col.4, lines: 30-40).

In reference to claim 49, Lo teaches further comprising after the transferring F, removing the sacrificial layer from over the TFT (Col.5, lines: 1-15).

In reference to claim 50, Lo teaches a method comprising:

Forming a gate(Col.4, lines: 10-23 and Fig.1 (13));

Forming a polycrystalline TFT layer over the gate (Col.2, lines: 23-33 and Fig.1 (15));

Forming a F containing layer over the polycrystalline TFT layer(Col.4, lines: 33-41);

Providing a buffering layer intermediate the TFT layer and the F containing layer (Col.5, lines: 1-15); and

Transferring F into the polycrystalline TFT from the F containing layer (Fig.1 (15)).

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lo et al ('589) teaches the same method.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M Schillinger whose telephone number is (703) 308-6425. The examiner can normally be reached on M-F 7:00 -4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Bowers can be reached on (703) 308-2417. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1500.

LMS

November 19, 2001



Charles Bowers  
Supervisor Patent Examiner  
Technology Center 2800